

APPENDIX D
STATE CONTROLLER COMMENTS



State of North Carolina Office of the State Controller

December 18, 1992

Mr. Curtis Clark
Executive Director, Government Performance Audit Committee
612 Legislative Office Building
Raleigh, North Carolina 27603

Dear Curtis,

We appreciate the opportunity to review and to respond to the findings and recommendations in the Performance Audit Report on Information Technology and Telecommunications prepared by KPMG Peat Marwick.

Information technology and telecommunications are vital and dynamic functions in state government. We are pleased that the first phase of the Government Performance Audit included this subject and believe that the findings in general are valid and lead to recommendations which can bring about substantial improvements in the efficiency and operating costs of our state. We are very much in favor of changes in governance in this area and in more clearly assigning responsibility, authority, planning and review functions. The newly-formed Information Resource Management Commission, which is organized and established in accordance with your recommendations, has the authority and direction to be a powerful and beneficial force in improving our state government.

As discussed on Page 2.9 of the report, the Office of the State Controller requested a study of the State Information Processing Services (SIPS) organization in 1991 and, following its recommendations, had initiated a reorganization of SIPS and was working toward implementing many of the changes that are recommended in this report before the performance audit work commenced.

With regard to certain of the report findings, we offer the following comments:

- ◆ Page 1.3 of Section 1, Background, Objectives, Scope, and Methodology, states that "... North Carolina still has not achieved the uniformly high quality of systems and services at acceptable cost that its citizens need and are entitled to receive."

On a statewide level, we agree with this statement. However, we note that North Carolina has been

nationally recognized for its progressive technology initiatives. Mainframe computer consolidation has resulted in the ability to acquire the most advanced hardware/software technology available for use by all departments and at the same time reduce its unit computing cost by 70%. A recent comparative study shows that the cost of operating the State Information Processing Services (SIPS) computer center is only 74% of the cost of operating comparable data centers. SIPS' cost was the lowest for the governmental data centers included in this comparison. Since this study, the rate charged for services of the State Computer Center (SCC) were reduced by 19% in July, 1992, and an even greater reduction is contemplated in early 1993.

Consolidation of state data networks has enabled North Carolina also to offer leading edge network technology (i.e., statewide, digital, integrated voice, data, and video network) to state and local government agencies. Comparison of the state's rates for telecommunications services with other state governments shows North Carolina's service rate to be among the lowest in the nation.

We recognize the fact that information technology is constantly changing and we agree that improvements can and should be made.

- ◆ **Finding 1** (Page 3.1) states that gross revenue in fiscal year 1991 exceeded current operating costs by \$9 million. This statement is also made in Finding 33 on Page 3.56. The cost of the computer upgrade made in 1992 was approximately \$9 million and the \$9 million reserve used to pay for the upgrade was accumulated over a period of more than one fiscal year, as indicated in Figure 6.
- ◆ **Finding 6** (Page 3.9) addresses the \$9 million mainframe computer upgrade. SIPS routinely upgrades its equipment as needed to meet client service requirements or to reduce operating costs and has done so four times since June 30, 1986, and has included amounts in its approved billing rates to accumulate reserve funds to pay for the upgrades. At the current rate of growth in processing requirements of the agencies, a further upgrade will probably be required in early 1995. Major expenditures (i.e., central processing units [CPU]) have been discussed with OSC management, the SIPS Advisory Board, and the ITC for their concurrence. Because of the large dollar amount (\$9 million) necessary for the April 1992 CPU replacement, SIPS management made numerous presentations on the need and justification for an expenditure of this magnitude. Separate presentations were made to:
 - OSC Management
 - SIPS Advisory Board
 - New Deputy for IRM
 - ITC Executive Committee
 - State Budget Officer
 - Director of Automated Systems - General Assembly
 - ITC
 - Legislative Computer Services Study Commission
 - Joint Legislative Commission on Governmental Operations

SIPS is subject to the same budgetary reporting and approval procedures as an agency that receives its funding from General Assembly appropriations. The standard state monthly budget reports (BD-701) prepared by the Office of State Budget and Management show SIPS' budgets, expenditures, and cash reserves each month.

- ◆ **Finding 11** (Page 3.16) addresses the lack of coordination and integration of technology planning. We

concur with the need to strengthen the IRM planning process both at the state level and the departmental level. What may be misleading is the focus on the annual printed documents. State planning information is not limited to these documents. Coordination and integration planning of departmental initiatives is an ongoing process throughout the year. As departments discuss their needs and plans for hardware, software, or application resources with SIPS, common need, consistency, and integration with other departments is always a major consideration. We are not aware of a need for integration that has not been met. These topics often take much of the agenda time of the SIPS Advisory Board.

- ◆ One of the implications of **Finding 18** (Page 3.30) is that SIPS does not use PC and advanced software development aids for its programming staff. The SIPS Systems Development Section has trained in and has used structured design and programming since the late 1970s, with the most recent training for the entire staff being in October 1988 and continuing into early 1989. This section has extensively used PC development for both PC and mainframe applications for several years and has acquired and is using the following software productivity tools: File AID, Q/Auditor, CICS Debug, Micro FOCUS COBOL Debugging Tools/Features, TIP, and Platinum Tools.
- ◆ **Finding 19** (Page 3.32) states that "North Carolina does not have adequate disaster recovery capability for its data centers nor for its mission critical applications." As an update on SIPS' 2 1/2 year effort to put a comprehensive alternative processing site and business recovery plans in place, we offer the following. SIPS now has full generator capability in operation that will sustain the SIPS facility indefinitely. In the event of a long-term loss of the SIPS facility (e.g., tornado damage) SIPS has a contract in place for duplication of its computing and network resources at a hot-site back-up facility in Tampa, Florida. In September, SIPS tested its recovery capability by successfully loading (transferring) its system software and client databases to the Tampa facility. A contract has been issued to the hot-site vendor to work with SIPS client departments to develop a recovery plan for their critical SIPS-based applications.
- ◆ **Finding 32** (Page 3.54) states, "SIPS' bills would be more useful if they presented information that enabled agencies to manage their associated costs and resources." There is not, and never has been, any reluctance by SIPS to format or produce billing and usage data in a format that would be most useful to its clients. The problem has been getting any concurrence by its using departments as to what information SIPS should produce and in what format. In addition to the monthly SIPS service bills, SIPS provides six different billing analysis reports, which are distributed to department heads, departmental fiscal officers, and departmental IRM managers. SIPS has voluminous minute usage detail that is available for departmental access and also makes detailed usage data available in magnetic form to any department wishing to do further analysis. SIPS' willingness to provide this information has been communicated to the user agencies on several occasions.
- ◆ **Finding 34** (Page 3.57) states, "SIPS' reserve accumulation will likely impact agencies that obtain federal reimbursements."

Recommendation — The State Controller should work with the affected agencies to anticipate and minimize the adverse impact of this directive and of Circular A-87 in general.

- ◆ **Finding 35** (Page 3.58) states, "SIPS' reserve requirements are increased by the requirement that it pay current funds for all procurements."

Recommendation — The Advisory Budget Commission should consider reversing its policy and

allowing SIPS to acquire major equipment through lease-purchase agreement.

The Office of the State Controller (OSC) agrees that OMB Circular A-87 defines the accumulation of reserves as "unallowable costs" chargeable to programs supported by federal funds. Also, the OSC agrees that the SIPS State Computer Center, an internal service fund which must operate as a business, has included in its billings for services an amount that would provide adequate cash resources for operating expenses and capital expenditures based on projected user demand.

In accordance with State policy as set forth by the Office of State Budget and Management resulting from a mandate, by the Advisory Budget Commission, SIPS State Computer Center changed its business practice from the leasing and lease-purchase of capital equipment to cash purchase of capital equipment. The change in this business practice required that available cash resources be accumulated in an amount sufficient to pay cash for capital equipment when required. Therefore, the billings for computer services have included in the rates a provision for expected capital requirements based on projected user demand. This business practice has saved the State (and all funding sources, including the federal government) a considerable amount of money by avoiding financing and lease expense which would cost considerably more than cash purchases.

The State of North Carolina and each of its agencies, including SIPS State Computer Center, has been operating in accordance with a federally-approved statewide cost allocation plan prepared under the provisions of OMB Circular A-87 for many years. Included in the federally approved statewide cost allocation plan each year has been a settlement of "OMB Circular A-87 unallowable costs." Any and all "unallowable costs" (as defined by OMB Circular A-87) generated by SIPS State Computer Center, or any other internal service fund, have been settled through this federally approved procedure. As a result, neither the State of North Carolina nor any of its agencies, including SIPS State Computer Center, owe the federal government for any "unallowable costs."

Federally-approved procedures further provided that agencies having substantial federal funding, and receiving service from a central internal service fund, would adjust for any anticipated "unallowable costs" in its current draw-down of federal funds. As a result, a federal grant source would not be charged currently for expected "unallowable costs" which would later be settled through the federally approved statewide cost allocation plan.

The State of North Carolina has been one of many states, especially states in the Southeastern Region with headquarters in Atlanta, Georgia, that have used similar federally approved procedures for "unallowable costs" adjustments in the administration of OMB Circular A-87. The OSC believes the procedure has worked well for both the state and the federal governments in reconciling good business practices with very narrowly defined requirements for federal grant administration.

The OSC does not agree with the comments cited under Finding 34 regarding a "problem" incurred by the Employment Security Commission with the federal government which state that "it may owe several million dollars in repayment for prior-year reimbursements of ineligible expenses, namely, SIPS' billings for reserve accumulation." As explained above, in accordance with the federally-approved procedure, "unallowable costs" (including premiums for reserve accumulation) incurred by SIPS State Computer Center have been settled through the statewide cost allocation plan. By deducting from central state government indirect costs the amounts which are "unallowable costs" as defined by OMB Circular A-87 before allocating to individual agencies, only the net allowable indirect cost is available for state agencies to charge federal grant sources. As a result there has been no "ineligible expense" to the Employment

Security Commission emanating from SIPS' billings which have not otherwise been resolved through other federally-approved alternative procedures.

The OSC is aware of the federal government directive regarding the change in procedure in adjustments through the SWCAP for fiscal years after July 1, 1992, and has an ongoing dialogue with the HHS Division of Cost Allocation regarding implementation of the directive. Also, the OSC has recently assumed the SWCAP preparation responsibility from the OSBM and has assigned a person full time to this function. In addition this position will coordinate the operational aspects of OMB Circular A-87 in the various state agencies receiving federal grants to assure consistent application of the provisions of the circular.

The OSC does not necessarily agree with the recommendation under Finding 41 that "The Advisory Budget Commission should consider reversing its policy and allowing SIPS to lease major equipment" and disagrees with the statement that "If SIPS could operate with a substantially lower reserve . . . it could substantially reduce its billing premium percentage." It appears the finding is addressing a cash flow issue and has lost sight of minimizing costs.

The OSC believes internal service funds should be operated in accordance with good business practices which require costs to be minimized, regardless of the conflict between such practices and the provisions of OMB Circular A-87. Because SIPS State Computer Center has not leased equipment (which is an "allowable cost" for A-87 purposes) but instead has purchased its capital equipment, the state and the federal government have realized substantial costs savings. Leased equipment costs are substantially higher than purchased equipment. Equipment acquired under capital leases or financing plans is less expensive than equipment acquired under straight lease, but is still more expensive than purchased equipment because of interest and finance charges and possible losses of residual values in equipment at the time of lease termination.

The OSC believes SIPS State Computer Center rates reflect substantial cost savings which have been passed on to state agencies using the computer resources. These favorable rates have resulted from the minimizing of costs through good business practices as recently confirmed by an independent study conducted by Real Decisions (and alluded to earlier) in which it was reported that the State Computer Center costs were 74% of the cost of similar computer centers in their data base of computer centers of comparable size. Although the OSC recognizes that the OMB Circular A-87 requirements are to be followed for cost allocation to grants, the OSC cannot agree that a business operation whose purpose is to meet state government user demand for computing services must conform its business practices to sometimes illogical federal procedures designed for grant administration, and not for internal service funds.

- ◆ **Finding 37** (Page 3.60) gives the impression that the planning which determined the size requirement of the upgrade of the computer was inadequate. We believe the planning was adequate to justify the decision which was made and believe that the results of the performance and events since the acquisition of the IBM Model ES/9000-900 show that the proper decision was made.
- ◆ **Finding 43** (Page 3.66) states, "SIPS is still managing its mainframe as two separate virtual machines instead of as a single image." This was true at the time of the KPMG study, but it is no longer true. The logical separation of the SIPS computer was to enable consolidation of the mainframe computers in state government without adversely impacting the affected departments. Using a single image concept (i.e., common system software and operating procedures) at the time of consolidation would have required the consolidated departments to have rewritten significant amounts of their application code and changed their operating practices. SIPS, in concurrence with its clients, opted for a planned evolutionary approach

to a single image mode concept. At the time of the KPMG study, the major constraint to finalizing the single image plan was the lack of CPU capacity. Single image would have required 12% additional CPU capacity. This capacity was not available until SIPS made the subsequent upgrade to the ES/9000-900 computer.

With regard to the findings and conclusions on the comparative study of the SIPS data center, shown in Finding 55 and Appendix C, we offer the following comments:

- ◆ **Finding 55** (Page 3.73) states, "Based on comparison with other data centers, the State Computer Center (SCC) has the potential to improve certain aspects of its utilization of resources, with appropriate support from its user agencies." We agree with this statement and the related recommendation that, to the extent possible, efforts should be made, primarily at the user level, to more efficiently utilize the SCC resources. Since the comparison of SIPS operations to those of other data centers is described in Appendix C as "SIPS' Peer Group Comparison," we offer the following comments on the methodology used to arrive at these conclusions.

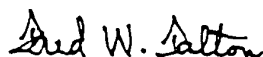
Reference to a study of operations and costs of the SCC which was performed less than one year ago by Real Decisions Corporation (RDC) is made in Appendix C. This study, which was designed primarily for the purpose of comparing the costs and certain performance measures with comparable centers included in the large database of RDC, concluded that the SCC costs compared very favorably with the costs of its "peers" which consisted of data centers having operating capacity approximating that of the SCC.

The Peat Marwick analysis, on the other hand, appears to compare the operations of the SCC with approximately 10 data centers in the private sector which process workloads similar in quantity (approximately 88%) to SCC's workload but which operated in a private sector environment in which the peak load requirements are not nearly as demanding as they are for government-type operations. Thus the SCC, with installed capacity of 123 MIPS (millions of instructions per second) and operating in a government environment, is being compared to 10 data centers having installed capacity of 73 MIPS operating in a private sector environment. At 123 MIPS of capacity, the SCC was operating near 100% of its capacity during much of the prime shift each day.

Because the SCC performs in a distinctly different operating environment where peak load requirements are substantially higher (i.e., driven by client departments and the citizens of North Carolina) than those of the data centers with which it is being compared, and because the SCC is 68% larger than the comparison group data centers in terms of capacity, we do not believe that the Peat Marwick comparison is a valid "peer group comparison." However, as stated above, we do agree with the recommendation resulting from that analysis which suggests that efforts should be explored to more efficiently employ the resources at the State Computer Center.

We are in general agreement with other findings not described above.

Sincerely,



Fred W. Talton
State Controller

FWT:jwm



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